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Abstract :

This document is a project proposal submitted to DRDL and details work contemplated. The work proposed consists of making a 1/10 scale model of a missile and instrumenting it for servo actuation and for rotary response sensing. By flying the model at various angles of attack and at various CG locations (including statically unstable case with a control law invoked). The responses to a known control surface input is analysed using MLE technique and the moment derivatives and trim are generated. This data is relevant in design of missile control design and specifically at low speeds when the missile will be statically unstable.